

Docket No.: 001

**APPLICATION
FOR
UNITED STATES LETTERS PATENT**

Title: DENTAL MIRROR SCRATCH RESISTANT
STERILIZING BAG

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DENTAL MIRROR SCRATCH RESISTANT STERILIZING BAG

Related Applications:

The present application is a continuation-in-part application of United States provisional patent application, serial number 60/453474, filed March 8, 2004, for DENTAL MIRROR SCRATCH RESISTANT STERILIZING BAG, by CINDY J. NATAY-CURLEY, included by reference herein and for which benefit of the priority date is hereby claimed.

Field of the Invention:

The present invention relates to self-seal sterilizing bags, and, more particularly, to a dual compartment dental mirror scratch resistant sterilizing bag for allowing dental mirrors to be sterilized for later use .

BACKGROUND OF THE INVENTION

It can be appreciated that self-seal sterilizing bags have been in use for years. Typically, self-seal sterilizing bags comprise one compartment for holding dental instrument set-ups, that include the dental mirror(s), during sterilization and for the instruments storing in a sterile condition following the sterilization process.

A problem exists with conventional one compartment self-seal sterilizing bags. When dental set-ups are packaged to be sterilized, the whole set-up is placed in a single compartment sterilizing bag. This normally includes one or two dental mirrors in a single set-up. Another problem with conventional one compartment self-seal sterilizing bags occur when the mirrors are placed in the sterilizing bag with other instruments. The mirrors tend to become scratched from contact with instruments. This will lead to replacing the mirror several times. Over time, this can become costly. Scratches on the dental mirrors

tend to interfere with visual images and usage.
Conventional self-seal one compartment sterilizing bags are
not made to prevent scratches on dental mirrors.

United States Patent No's. 4,660,721, 4,874,090 and
5,222,600, disclose various sterilization bags.

United States Patent No. 4,660,721, specifically granted to Laurie G. Mykleby, describes the STERILIZATION PACKAGE. Multi-layer sterilization package and process for sterilizing equipment wherein items are placed in the multilayer sterilization package which is adapted for use with a snorkel-type gas treatment apparatus; substantially all gas is withdrawn from the interior of the package; sterilization gas is injected into the interior and retained for a time sufficient to sterilize the equipment; sterilization gas is withdrawn from the package; and a cushioning gas is introduced into the package. The package is sealed to retain the cushioning gas, providing for effective gas leak detection.

United States Patent No. 4,874,090, specifically granted to Denis G. Dyke, describes the SELF-SEAL

STERILIZATION POUCH. A sterilizable pouch for holding items during sterilization and for storing such items in a sterile condition following sterilization. The pouch includes a first member and a second opposing member. The first member extends outwardly beyond one edge of the second member to define a flap. An opening is defined between the one edge of the second member and the flap. The remaining edges of the first and second members are sealed to one another to define the pouch. An adhesive backed strip having a removable liner over the adhesive is connected along one edge to the second member adjacent to or spaced from the opening and is dimensioned to cover the opening and the flap when the liner is removed and the adhesive backed strip is pressed against the opening and the flap.

United States Patent No. 5,222,600, specifically granted to James T. Stoddard and Charles D. Stoddard, describes the AUTOCLAVE POUCH. A receptacle for containing medical instruments for sterilization is constructed having first and second broad sides connected along side and bottom edges. These sides are in turn constructed of an

outer layer of flexible, durable fabric material, an intermediate layer of a plastic film material forming a barrier to microorganisms, and, in a preferred embodiment, an inner layer of the fabric material. A cuff extends from one of the edges adjacent the opening and is invertable over the opening to close the opening.

Prior art one compartment sterilizing bags may be suitable for the particular purpose to which they address, but they do not allow dental mirrors to be sterilized for later usage without scratches.

It is therefore an object of the invention to provide a dental mirror scratch resistant sterilizing bag with two compartments that will overcome the shortcomings of the prior art devices. It is another object of the invention to provide a dental mirror scratch resistant sterilizing bag with two compartments that will prevent scratches on dental mirrors.

It is another object of the invention to provide a dental mirror scratch resistant sterilizing bag with two

compartments for allowing dental mirror(S) to be sterilized, stored, transported and viewed for later use without scratches.

Another purpose is to provide a separation seal of a single sterilizing bag with dual compartments to separate the dental mirror(S) from other dental instruments in a single set-up.

It is another object of the invention to provide a dental mirror scratch resistant sterilizing bag with two compartments to allow packaging dental mirror(S) to be packaged along with other dental instruments in a single set-up.

It is another object of the invention to provide a dental mirror scratch resistant sterilizing bag with two compartments that has one self-seal adhesive strip with a removable liner to seal the pouch completely for sterilizing, storing, transporting and viewing for later usage.

It is another object of the invention to provide a dental mirror scratch resistant sterilizing bag with two compartments that will have one small compartment for one

to two dental mirror(S) and one large compartment for the remaining dental instruments for one set-up.

SUMMARY OF THE INVENTION

The conventional concept and designs of the prior art, and in doing so provides an apparatus primarily developed for the purpose of allowing dental mirrors to be sterilized for later usage without scratches. Another solution of my invention is to provide a separation seal of a single sterilizing bag with two compartments to separate dental mirror(S) from other dental instruments in a single set-up. The sterilizing bag will allow the dental instrument set-ups to sterilized, stored and viewed for later usage.

In accordance with the present invention, there is provided a self-seal, one compartment sterilizing bag. The present invention provides a new dental mirror scratch resistant sterilizing bag with a two compartment construction wherein the same can be utilized for allowing dental mirror(S) and other instruments to be sterilized,

stored, transported for later usage without scratches.

The general purpose of the present invention, which will be described subsequently in greater detail, is to provide a new dental mirror scratch resistant sterilizing bag that has many of the advantages of the self-seal, one compartment sterilizing bag mentioned heretofore. Moreover, many novel features that result in the new dental mirror scratch resistant sterilizing bag are not anticipated, rendered obvious, suggested, or even implied by any of the prior art self-seal sterilizing bags, either alone or in any combination thereof. The present invention generally comprises a dual compartment sterilizing bag which is sealed on three exterior edges. One seal separates two different size compartments in one single sterilizing bag. A sterilizing bag with one adhesive strip and an adhesive coating below the liner strip seals one set of dental instruments for a single set-up. The sterilizing bag includes a separate seal to divide room enough for 1-2 dental mirrors in one compartment. The larger compartment includes enough room for opposing member sheets. The bottom heat seal has a chevron configuration shape, and a heat

liner strip. A first top sheet like member and a second bottom sheet like member are provided. The larger compartment of the sterilizing bag is enough to sterilize, store, transport and view the dental instrument set-up of a single bag. The smaller compartment of the sterilizing bag is large enough to sterilize and store one or two dental mirrors in a single set-up.

BRIEF DESCRIPTION OF THE DRAWINGS

A complete understanding of the present invention may be obtained by reference to the accompanying drawings, when considered in conjunction with the subsequent, detailed description, in which:

Figure 1 is a top view view of an of the dental mirror scratch resistant sterilizing bag in accordance with the invention;

Figure 2 is a top view view of a the bag shown in

figure 1 with three heat sealed edges; the chevron configuration shape; one separate seal showing dual compartments;

Figure 3 is a perspective top view view of a the sterilizing bag with the top member lower right corner torn away to show the bottom member; and

Figure 4 is a bottom view view of a the sterilizing bag with two compartments.

For purposes of clarity and brevity, like elements and components will bear the same designations and numbering throughout the FIGURES.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Figure 1 is a top view of a dental mirror scratch resistant sterilizing bag 8 with two compartments. The Large compartment 20 of the sterilizing bag 8 has room

enough to sterilize and store a dental instrument set-up, not shown. The sterilization pouch 8 can have any suitable dimensions. Be utilized for sterilizing different types and sizes of equipment and/or instruments. The Large compartment 20 allows sterilizing, storing, and viewing of the dental instrument set-up with a Small compartment 21 attached.

The Large compartment 20 consists of the First top member 15 and a Second bottom member 13 attached by three heat seal edges and One dividing heat seal 11. The Large compartment 20 is rectangular in shape with a Top opening 17 to allow insertion of dental instruments, allowing for sterilizing, storing, transporting and viewing of the dental instruments set-up.

The Small compartment 21 of the sterilizing bag 8 is large enough to sterilize and store one or two dental mirrors, not shown, of a single set-up. The Small compartment 21 allows for sterilizing, storing and viewing of one or two dental mirrors with the Large compartment 20 attached. The Small compartment 21 is rectangular in shape also with a Top opening 17 to allow insertion of dental

mirrors. The Small compartment 21 is parallel to the Large compartment 20.

Figure 2 is a top view of the three heat sealed exterior edges around the opposing First top member 15 and Second bottom member 13 sheets. The First top member 15 and the Second bottom member 13 rectangular shapes are heat sealed on three of four sides to define the pouch between the opposing members. The three heat seals are placed slightly inward to the exterior edges 23 of the two rectangular members, 20 and 21. The bottom heat seal 10 has a Chevron configuration shape 12. The bottom seal 10 is slightly inward away from the bottom edge 23, allowing the First top member 15 and Second bottom member 13 to be peeled apart at the chevron configuration shaped 12 end so items can be removed.

The bottom Chevron configuration shape 12 or any suitable shape allows items to be stored in the pouch until ready for usage. The outer boundary is sealed along the parallel length of the first and second rectangular shaped members. One dividing heat seal 11 divides the two

compartments of one single sterilizing bag 8. The One dividing heat seal 11 allows separation of the dental mirror(S) from the remaining set-up of the dental instruments, preventing scratching of the surface of dental mirror(S) isolating the pointed instruments. The One dividing heat seal 11 is equal in width as to the three heat sealed exterior edges. The One dividing heat seal 11 divides the two compartments starting with the First top member 15 and ending with the Chevron configuration shape 12 heat seal. The One dividing heat seal 11 stops with the First top member 15, which is slightly shorter than the Second bottom member 13 and allows the user to sterilize, store, transport and view dental instruments in a sterile condition following sterilization.

Figure 3 is a top view of the layers of the dental mirror scratch resistant sterilizing bag 8 with two compartments 20 and 21. The First top member 15 lower right corner is torn away in this figure to show the Second bottom member 13. A Removable liner strip 14 is placed over the Adhesive strip 16 to protect the area until adhesion is

needed. Removable liner strip 14 is placed over the Adhesive strip 16 on the top area of the Second bottom member 13. The strip 14 is the same width as the First top member 15 and the Second bottom member 13. The Removable liner strip 14 is the same length and width as the Adhesive strip 16 and protects the Adhesive strip 16. Strip 14 has an upper surface and a bottom surface 22. The bottom surface 22 allows contact to the Adhesive strip 16 until needed for usage. The Removable liner strip 14 is parallel to the opening 17 of the sterilizing bag 8. The Removable liner strip 14 does not stay in contact during usage. The Removable liner strip 14 is removed with the adhesive coating 22 attached to expose the Adhesive strip 16 prior to usage. The Adhesive strip 16 is parallel to the Top opening 17 of the width of the sterilizing bag 8. The Adhesive strip 16 is closed by removing the liner strip 14 and folding over to adhere to the First top member 15. Strip 16 adheres for sterilizing and storage until usage of instruments. The Adhesive strip 16 is the same width and length as the Removable liner strip 14 and allows for adhesion to the First top member 15 once the Removable

liner strip 14 is removed and discarded. The Second bottom member 13 is then folded over to allow adhesion to the First top member 15.

Figure 4 is a bottom view of the dental mirror scratch resistant sterilizing bag 8 showing the Second bottom member 13 with the three heat sealed exterior edges and the One dividing heat seal 11 of the two compartments, 20 and 21. The beginning of the top heat seal 19 and ending of the bottom heat seal 18.

Since other modifications and changes varied to fit particular operating requirements and environments will be apparent to those skilled in the art, the invention is not considered limited to the example chosen for purposes of disclosure, and covers all changes and modifications which do not constitute departures from the true spirit and scope of this invention.

Having thus described the invention, what is desired to be protected by Letters Patent is presented in the subsequently appended claims.